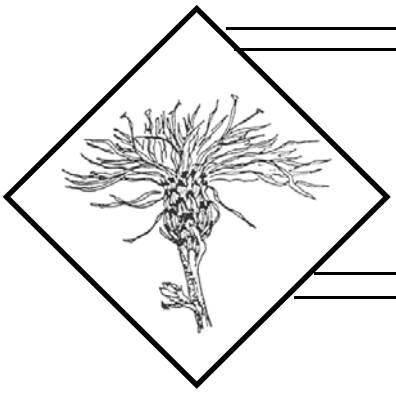


Weeds in the Garden
Spotted Knapweed

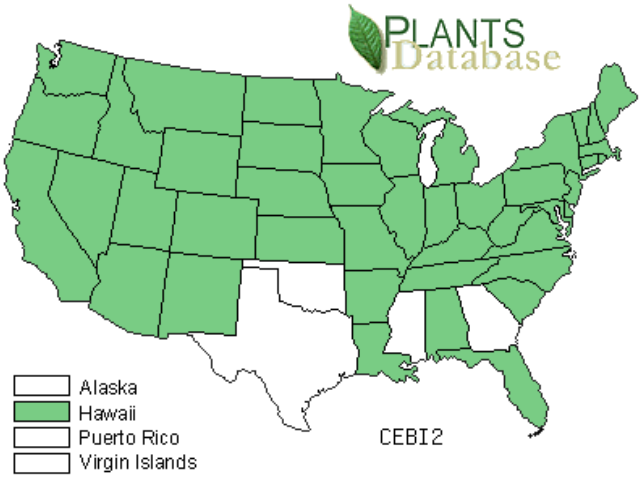
Common Name: spotted knapweed

Scientific Name: *Centaurea maculosa*

Characteristics: Spotted knapweed is a biennial or short-lived perennial forbe. It is generally 1-3 feet in height. Its branched stems are slender and hairy and its leaves are divided into narrow segments. The composite flowers are thistle –like structures about ¾ inch in diameter and are usually pink or purple. Seeds are brownish and have a thick tuft of bristles, which allow it to be dispersed by the wind. The plant has a stiff taproot.

"Look Alikes": Russian knapweed, white-flowered knapweed, bachelor's button, and purple asters can be mistaken for spotted knapweed. Look for knapweed's thin, angular stems and thistle like head.

Current Range: Spotted knapweed is found throughout much of the U.S. It is a serious problem in rangelands in the northwest.



Origin: The word "knapweed" comes from the old English and German word "knobbe", meaning a knob, bump or button. This name was probably given to knapweed to describe the flower head, which blooms from a compact bud. A native to Europe and Asia, spotted knapweed was probably introduced to North America in the 1890's as a contaminant in alfalfa or hayseed.

Habitat: Spotted knapweeed is often found in abandoned gravel pits, on filled ground, roadsides, dumps and in gullies. It can also be found in fields, yards, logging roads or other areas with sandy dry soils.

The Problem: One key to the success of spotted knapweed is its reproductive strategy. It reproduces solely by seed, but each plant can produce about 1000 seeds and each seed can remain viable for up to 7 years. Another survival strategy for spotted knapweed is its ability to thrive on disturbed sites and in sunny areas. A third advantage is that spotted knapweed begins its spring growth before many native plants and thus gets a head start. It is a serious problem in western rangelands where it can increase soil erosion by outcompeting native species, which hold soil more closely.

Solutions:

Prevention – Spotted knapweed can be spread through infested hay or on vehicle undercarriages. Farmers and citizens can reduce this threat by avoiding hay from infested areas. It is also important to check vehicles for plants caught on the undercarriages and to remove small infestations early, before the plants gain a foothold.

Biological Control – Experimental work is underway with two root-mining moths, a flower moth and a root-mining beetle. While this work holds promise, study results are not complete and insects are not available for general use at this time.

Mechanical – Small spotted knapweed populations can be removed by pulling or digging, but the entire root must be removed. Burning can be used in heavily infested areas, followed by pulling.

Chemical – On western rangelands, some highly potent chemicals have been used but less toxic chemicals such as Picloram and Clopyalid are the most commonly used herbicides. In the Great Lakes region, chemicals can be considered if mechanical means have been exhausted. Prior to use of chemical herbicides, it is important to consult with local natural resource staff to determine which herbicides would be the most effective and would have the least impact on native species. It is also essential to follow safety instructions on the selected product.

For more information please contact the
Ottawa National Forest at:
E6248 U.S.2, Ironwood, Michigan 49938 (906)932-1330